



pH – a scale from 0 to 14 that measures the acid or base nature of all things.

pH 7 is neutral

pH >7 is basic

pH <7 is acidic

Optimum pool pH is 7.5, the pH of the eye. Acceptable pH range is 7.2 to 8.0.

Small differences make a BIG difference because the scale is logarithmic. This means that a pH of 6 is 10 times more acidic than a pH of 7, and a pH of 5 is 100 times (10x10) more acidic than a pH of 7, and so on. Acid has a pH 0 to 1 and is 10,000,000 times more acidic than pool water.

Problems if pH is too low:

Corrosion, etching of plaster, wrinkling of vinyl liner

Eye burning and skin irritation

Rapid chlorine dissipation

What causes pH to change:

1. Chlorine
 - Chlorine gas lowers pH considerably
 - Trichloro (cartridge, tablets) lowers pH slightly
 - Dichloro has a negligible effect
 - Lithium Hypochlorite raises pH slightly
 - Calcium Hypochlorite raises pH
 - Sodium Hypochlorite raises pH considerably
2. Make-up water
3. Fresh Plaster
4. Rain and Dust
5. Swimmers and their waste
6. Algae Growth (absorbs Carbon Dioxide and raises pH)

How to Adjust pH:

To Decrease

Sodium Bisulfate

Dry Acid

Muriatic Acid

Hydrochloric Acid

To Increase

Soda Ash

Sodium Bicarbonate

WARNING: Never add more than 1 lb. (20 liquid oz.) per 10,000 gallons pool water in a 4 hour period.